



Bike Rental Analysis

How does a bike-share navigate speedy success?



Francisco L. Carnabucci / June '24

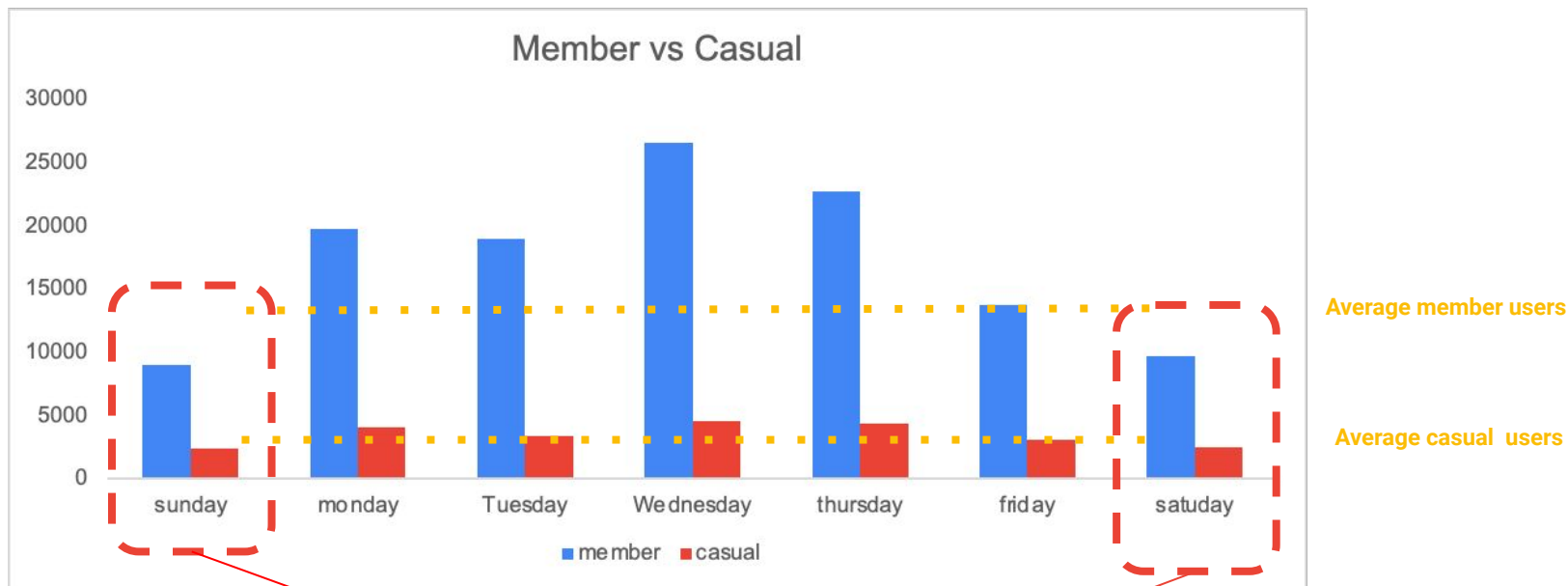
Cyclistic's historical data to analyze and identify trends

How do annual members and casual riders use Cyclistic bikes differently?

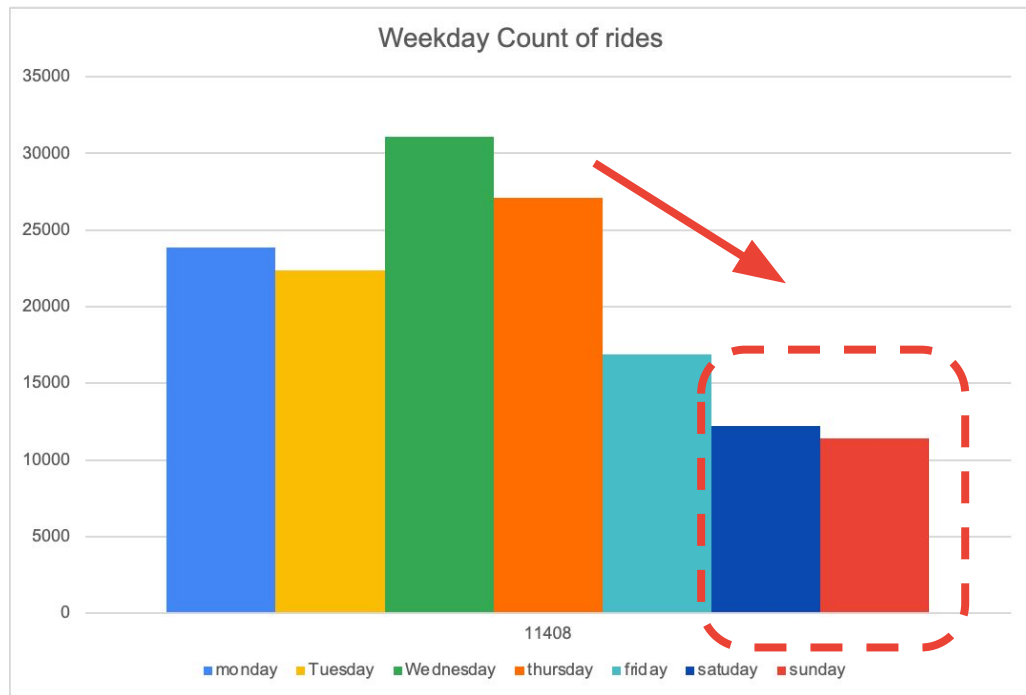
- Analysis of members vs casual use **by weekday**
- **Weekday** count of rides
- Count ride **per hour by weekday**
- Count ride **heat map** by per hour by weekday
- Which **Stations** Casual use more often

Analysis of members vs casual use **by weekday**

On Weekends, there is a low member usage, but **casual use is similar to weekdays.**

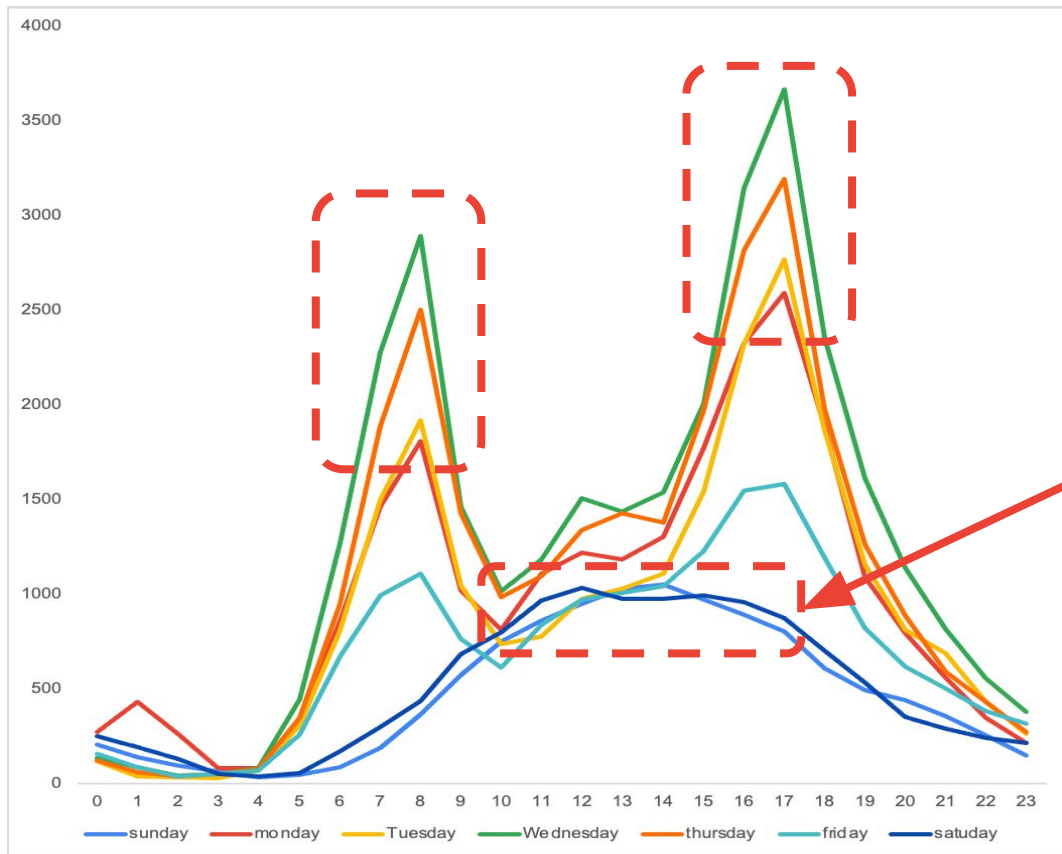


Weekday count of rides



- Peak day is **Wednesday**
- Finding: during **weekends** usage is **50% lower**

Count ride **per hour by weekday**



- Peak hour is **5 PM and second 7-8 AM**
- Peak day is **Wednesday**
- Finding: during **weekends peak hour is during midday**

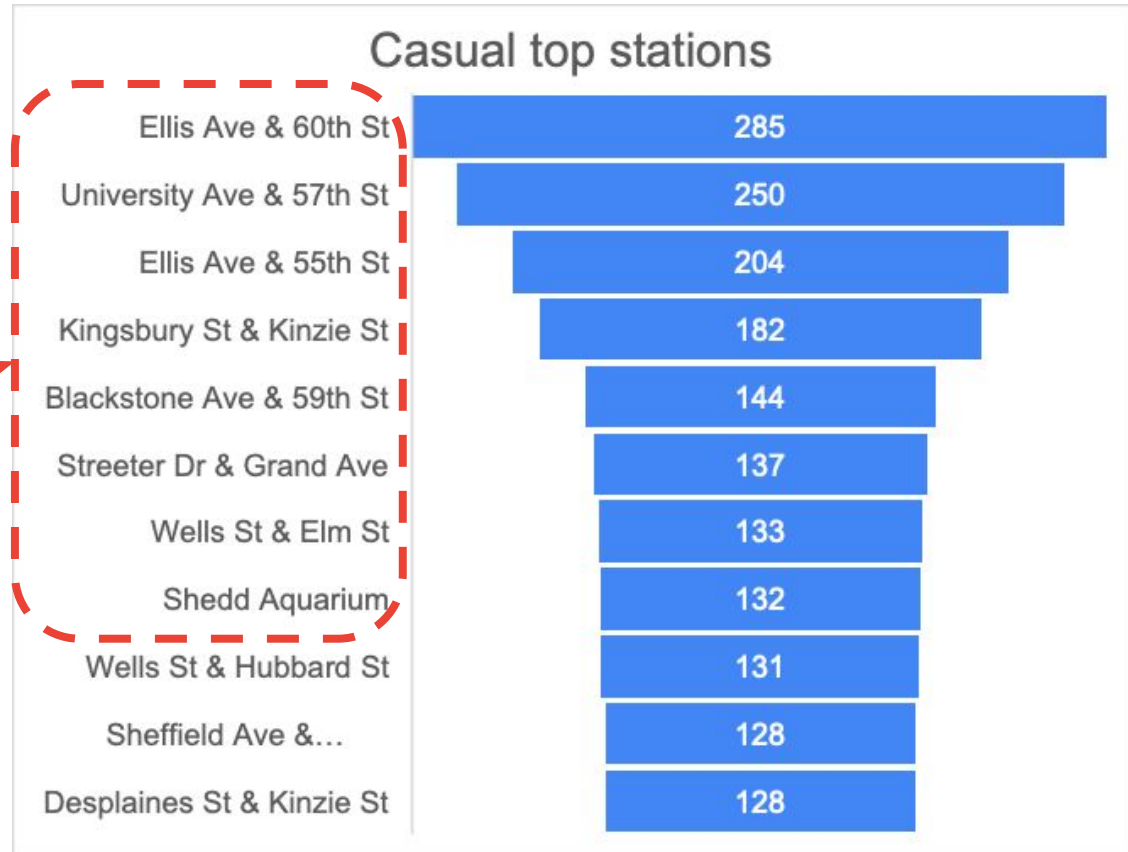
Count ride **heat map** by per hour by weekday

COUNT	day_of_the_week							Grand Total
hour	sunday	monday	Tuesday	Wednesday	thursday	friday	saturday	
0	207	271	120	137	124	157	252	1.268
1	138	430	37	85	60	86	191	1.027
2	94	265	33	43	39	40	129	643
3	65	82	31	50	53	52	52	385
4	33	83	67	83	76	68	40	450
5	48	329	306	446	346	259	54	1.788
6	87	858	808	1.269	951	670	171	4.814
7	188	1.462	1.500	2.278	1.886	996	299	8.609
8	366	1.809	1.918	2.890	2.501	1.108	438	11.030
9	573	1.021	1.045	1.464	1.427	762	685	6.977
10	749	814	738	1.018	986	612	800	5.717
11	859	1.107	778	1.184	1.096	839	968	6.831
12	949	1.220	976	1.508	1.338	972	1.032	7.995
13	1.029	1.186	1.030	1.438	1.426	1.008	978	8.095
14	1.052	1.304	1.109	1.538	1.379	1.043	977	8.402
15	972	1.774	1.543	2.008	1.971	1.230	992	10.490
16	893	2.325	2.320	3.142	2.815	1.545	960	14.000
17	802	2.593	2.766	3.668	3.191	1.581	873	15.474
18	611	1.888	1.865	2.355	1.974	1.195	702	10.591
19	494	1.092	1.157	1.613	1.264	823	534	6.977
20	439	795	811	1.140	889	617	353	5.044
21	357	560	688	815	590	504	292	3.806
22	255	350	434	556	431	383	241	2.650
23	148	217	264	377	274	316	214	1.810
Grand	11.408	23.835	22.344	31.105	27.087	16.866	12.228	144.873

There is opportunity to increase demand during low use in **weekends**, offering discounts and special fares during these days.

Which **Stations** Casual use more often

There is opportunity to focus marketing actions on this stations during **weekends, offering discounts and special fares during midday hours**



Business **insights and recommendations**

Increase promotions in Low Usage periods

Use low usage hours and days to offer new promotions to increase value in low income time periods

Offer weekends packages

Weekends Casual users are on average similar to a weekday. There is opportunity to offer these users weekends only packages.

Station Selections for marketing actions

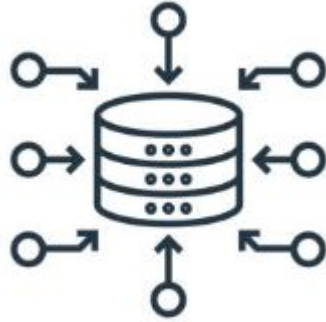
Use the top 5 stations for Casual users to improve marketing actions efficiency.

A description of all Data Sources used

Ask, Prepare, Process, Analyze, Share, and Act



Data source
CSV files:
Previous 12
Cyclistic trip
data



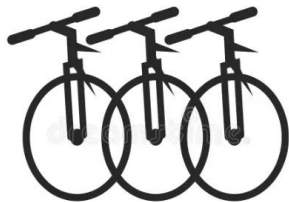
BigQuery SQL
for data
aggregation



Bigquery SQL
data cleansing/
transformation



Excel for building
Graphs and final
presentations in
Google Pres.



BIKERENTAL

Q&A

End of presentation



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